

**LESSON 20, 21, 22, & 23: Ionic Compounds, Formulas for Ionic Compounds, Polyatomic Ions, and Transition Metals**

68. What is an ionic compound?

Compound composed of metal cations and nonmetal anions  
 so that the charges add up to zero

69. How do the charges add up to zero in  $\text{CaCl}_2$ ?

70. Write the formula of the ionic compound forming between sodium and oxygen ions.

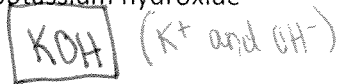


71. Write the names of:

- a.  $\text{KCl}$  potassium chloride  
 b.  $\text{NaNO}_3$  sodium nitrate  
 c.  $\text{MgO}$  magnesium oxide  
 d.  $\text{Li}_2\text{SO}_4$  lithium sulfate  
 e.  $\text{CoBr}_2$  cobalt(II) bromide

72. Write the formulas of:

a. potassium hydroxide



b. aluminum sulfide



c. sodium fluoride



d. calcium oxide



e. iron(III) chloride

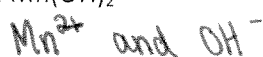


f. barium nitride



73. Write the cation and ion in:

a. lithium oxide

b.  $\text{Mn}(\text{OH})_2$ c.  $\text{Al}_2\text{O}_3$ d.  $\text{Cu}_2\text{CO}_3$ 

e. magnesium phosphate

f.  $\text{MgBr}_2$ **LESSON 24: Electron Configurations**

74. How many subshells are there, their respective names, and how many electrons can each hold?

- 4 subshells
- "s" (can hold 2 e<sup>-</sup>)
- p (can hold 6 e<sup>-</sup>)
- d (can hold 10 e<sup>-</sup>)
- f (can hold 14 e<sup>-</sup>)